BEDSIDE MEDICINE FOR BEDSIDE DOCTORS

An Open Forum for brief discussions of the workaday problems of the bedside doctor. Suggestions of subjects for discussion invited.

PREVENTION AND POSTPARTUM CARE OF TENDER AND FISSURED NIPPLES

EDWARD N. EWER, M. D. (251 Moss Avenue, Oakland).—Maceration and traumatism caused by nursing often result in erosions and cracks in the epidermal layer of the skin of the nipple. Thus the papillae are left unprotected and the lesions not only become extremely tender but furnish entrances for pyogenic organisms which may cause infection.

Prenatal preparation of the nipples has for its object the toughening of this epidermis.

It is desirable that the skin of the nipple should become of a texture which will resist maceration and at the same time be pliable. These results are not attained by applying albumen-coagulating astringents such as brandy, cologne, tannin, and alum. These agents harden the skin and make it brittle, but not pliable. Neither should the tissues be soddened by greases, salves, and oils.

It is notable how little change we find in this line of textbook treatment as time passes, in spite of the fact that concurrently we are told that 40 to 50 per cent of primiparae continue to suffer with fissured nipples. Occasionally a writer ventures a doubt as to whether these measures *ever* prevent sore nipples, suggesting that they seem to be an unavoidable accompaniment of the early stage of lactation.

Fortunately we need not be so pessimistic. The epidermis can be rendered resistant by daily dry friction with a crash towel or preferably with a small soft nail brush which can be sterilized. This must be done during the whole of the latter half of pregnancy; gently at first, for roughness before the nipples become toughened may make them bleed.

The nipples and breasts should be washed daily with soap and water to remove all crusted secretions, and the brushing should be done later when they are quite dry.

If the nipples are small or moderately inverted, attempts may be made to form them by manipulation with clean fingers or by pulling them out with a warmed bottle. An eight-ounce nursing bottle will do. It is to be filled with hot water, emptied and the mouth inverted over the nipple. Badly inverted nipples cannot be made to perform their service.

Too much washing during the puerperium is bad. Thorough cleansing with sterile cold water immediately after nursing, followed by careful drying and covering with four-inch squares of sterile gauze held in place with tie straps is sufficient. The nipple then remains in clean condition for the next nursing, and half the usual washing is eliminated. Certainly, making a few dabs with a toothpick and cotton applicator moistened with boric solution before and after each nursing is useless.

Even a well-prepared nipple subjected to prolonged nursing after secretion ceases may become sore. The mother can easily be taught to note when the infant stops swallowing and it should not then be allowed to use her nipple as a pacifier. Nurses often wrongly insist on twenty minutes for a feeding even though milk is no longer obtained after the first five or ten.

If these suggestions for prenatal treatment of nipples are faithfully carried out, cracks and erosions will be exceedingly rare. When they do occur and resist treatment, substitute feeding, now so wonderfully successful, is to be advised rather than to subject the mother to the torture of prolonged attempts at breast nursing.

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CHRIS R. HALLORAN, M. D. (1052 West Sixth Street, Los Angeles).—The busy obstetrician frequently considers that since the breast is a gland of the skin the dermatologist may not be excused from interest in the mischief the organ so frequently makes during lactation.

According to different authors the frequency of tenderness and fissures of the nipples varies, the average estimation being between 40 and 50 per cent. Blondes seem more susceptible than brunettes, and the occurrence is much more frequent in primiparae than in multiparae. Some authors consider the etiology of the sore and fissured nipples to be primarily bacteriologic, others contend that the trauma of nursing is the most important factor. Malformation of the nipple, particularly the retracted nipple, predisposes to inflammation since the trauma it receives during nursing often removes the epithelium at various points, leaving the unprotected papillae to be readily attacked by bacteria.

There is marked difference of opinion as to the value of various prophylactic measures. Van Dolsen[1] found that hypochlorite solution, one-tenth of one per cent, sopped on the nipples for one minute before nursing, greatly decreased the occurrence of soreness or fissuring, whereas the use of boric acid solution was proven ineffective. Mabbott[2] instructs his patients to thoroughly massage the nipples with lanolin at bedtime each night for four to six weeks before the expected

[1] Van Dolson, W. M.: The Fallacy of the Present Treatment of the Postpartum Breast, Am. J. Obst. and Gynec., Vol. 13, No. 2, p. 236 (Feb.), 1927.

[2] Mabbott, J. Milton: The Prevention of Sore Nipples, N. Y. Med. J, Vol. 68, p. 371.

date of confinement. Beck[3] considers that another important factor is trauma to which the nipples may be unnecessarily subjected the first few days after delivery, during which period little or no nourishment is obtained from the breast. The nipples may be spared this unnecessary trauma by permitting the child to go to the breast only every six hours for the first two or three days and by using but one nipple at these nursings for five minutes. After the milk comes in, feedings may be given every three or four hours and last for twenty minutes.

Through the courtesy of Dr. Lyle G. McNeile, a ward in his service at the Los Angeles County General Hospital was set apart and a series of some two hundred cases of tender and fissured nipples was studied over a period of several months.* Cultures taken from a few cases selected at random revealed micrococcus catarrhalis and staphylococci. Fissured nipples seemed more prone to develop in two classes of cases: (*a*) In nipples that were not sufficiently hardened to withstand the trauma incident to nursing, and (*b*) in nipples that were not sufficiently pliable. With the first group of patients an attempt was made to toughen the nipples morning and evening with applications of glyrecid of tannin. The nipples of the *b* group were massaged twice daily with cocoa butter.

The most effective prophylactic measure was found to be the routine application, before delivery and for the first three days after delivery, of compound tincture of benzoin twice daily. All patients tolerated the routine compound tincture of benzoin care except one red-haired woman who developed a slight venenata which subsided upon discontinuation of the treatment. Nipples that in spite of this care began to become tender responded equally well to castor oil and bismuth paste—equal parts, applied between nursings; or to an ointment of two per cent resorcin in equal parts of lanolin and white vaselin. The majority of nipples in which a crevice occurred were found to respond readily to painting the fissure with 70 per cent alcohol. If this procedure did not clear up the condition within twenty-four hours, a compress of alcohol twice daily, followed by an hour of exposure to the direct rays of the sun, gave a rapid response. The compresses of alcohol, however, were found irritating to a few blond patients. The most marked cases of fissuring were found to respond best to painting the crevice twice daily with silver of nitrate followed by an hour of exposure to the direct rays of the sun.

Wax-paper covers proved to be the most satisfactory dressing. It was found that if the tincture of benzoin was permitted to dry before the covers were applied they did not adhere.

3 Beck, Alfred C.: Care of the Breast During Pregnancy and Puerperium, Am. J. Nursing, Vol. 23, No. 8, p. 798 (Aug.), 1928.

* The writer wishes to express his appreciation to Dr. Lyle G. McNeile for permitting him to make this study, and to Miss Margaret Komar for her nursing supervision.

PHILIP ARNOT, M. D. (490 Post Street, San Francisco).—The most common symptom of fissured and eroded nipples is tenderness. This varies with different individuals, but it is usually quite marked and makes the act of nursing very painful. It is usually limited to the nipple, although occasionally the pain radiates out into the breast.

Bleeding is not always present and varies in amount. If it is very much the baby usually swallows some blood during nursing and, if vomited up, usually creates considerable alarm among members of the family. Bleeding is more common with fissured nipples than with eroded ones.

The prognosis is usually good and the lesions usually will heal up in four or five days if properly treated. If there is no improvement after four or five days' treatment the baby should be put upon formula and the breasts dried up.

The danger of mastitis and possible abscess formation is too great to allow the lesions to remain indefinitely. If they are not well after five days of treatment the breasts should be dried up. In some cases the exquisite pain and bleeding continues unabated in spite of treatment, and one may have to start drying up the breasts within one or two days.

Some patients may respond rapidly in the hospital, only to go home and develop abscesses within two weeks. One can never predict which patient will or will not develop an abscess.

As regards treatment, the baby should not be allowed to nurse directly on the nipple but should nurse through a combination glass and rubber nipple shield, care being taken to see that the openings in the rubber nipple are large enough. In rare cases this may not work and the breasts should then be pumped at regular intervals.

The fissures should be touched up twice daily with silver nitrate stick and an ointment containing compound tincture of benzoin, olive oil and lanolin applied after each nursing or pumping. I have also used merthiolate ointment with good results. This ointment is washed off with boric acid solution before each nursing.

For eroded nipples a drop or two of 5 to 10 per cent silver nitrate should be applied twice daily and then one of the above ointments applied.

Lead Poisoning in Children.—According to McKhann, lead poisoning in children produces a severe and dangerous form of cerebral involvement in which the symptoms apparently are dependent on the development of an extreme cerebral edema. Less frequently there is encountered the peripheral neuritis commonly observed in adults with lead poisoning. Children who survive a severe lead encephalitis are frequently left with permanent neurologic disorders. The early diagnosis of lead poisoning based on a carefully taken history and physical examination, confirmed by roentgenologic and laboratory data, should lead to the institution of active therapy, which may result in the prevention of the development of serious neurologic manifestations. In the presence of the acute, severe cerebral manifestations, attention must be directed toward the control of greatly increased intracranial tension.—*Archives of Neurology and Psychiatry,* and *Journal of the American Medical Association,* Vol. 98, No. 17.